

WHAT IS CLAIMED IS:

- 1 1. A computer-implemented method for managing processors as
2 system devices, the method comprising:

3 executing an operating system by one or more first
4 processors included in a group of heterogeneous
5 processors;

6 loading a device module corresponding to one or more
7 secondary processors included in the group of
8 heterogeneous processors into the operating system;

9 loading an application using the operating system, the
10 application including device-oriented instructions
11 adapted to control the one or more of the secondary
12 processors; and

13 performing the device-oriented instructions at the one
14 or more of the secondary processors.

- 1 2. The method of Claim 1, further comprising setting up a
2 device-like access for one or more of the secondary
3 processors, the device-like access being used by the
4 application to access one or more of the secondary
5 processors.

- 1 3. The method of Claim 2, further comprising creating a
2 configuration file, the configuration file containing a
3 list of one or more of the secondary processors and the
4 corresponding device-like access set up for the one or
5 more secondary processors.

1 4. The method of Claim 3, further comprising determining for
2 which of the one or more of the secondary processor the
3 application's device-oriented instructions are intended.

1 5. The method of Claim 4, wherein the determining is
2 performed using information from the configuration file.

1 6. The method of Claim 1, wherein the loading the device
2 module facilitates a communication between the
3 application and one or more of the secondary processors
4 by extending the operating system.

1 7. The method of Claim 1, further comprising translating the
2 application's instructions to secondary processor
3 instructions using the operating system.

1 8. The method of Claim 1, wherein the performing the device-
2 oriented instructions comprises the one or more secondary
3 processors processing application-provided data according
4 to the application's device-oriented instructions.

1 9. An information handling system comprising:

2 a plurality of heterogeneous processors, wherein the
3 plurality of heterogeneous processors includes one or
4 more first processors and one or more secondary
5 processors; and

6 a common memory accessible by the plurality of
7 heterogeneous processors, wherein:

8 the one or more first processors are adapted to:
9 execute an operating system;

10 load a device module corresponding to the one or
11 more secondary processors into the operating
12 system; and
13 load an application using the operating system,
14 the application including device-oriented
15 instructions adapted to control the one or more
16 secondary processors, and
17 the one or more secondary processors are adapted to
18 perform the device-oriented instructions.

1 10. The information handling system of Claim 9, wherein the
2 one or more first processors are further adapted to set
3 up a device-like access for one or more of the secondary
4 processors, wherein the application uses the device-like
5 access to access one or more of the secondary processors.

1 11. The information handling system of Claim 10, wherein the
2 one or more first processors are further adapted to
3 create a configuration file, the configuration file
4 containing a list of one or more of the secondary
5 processors and the corresponding device-like access set
6 up for the one or more secondary processors.

1 12. The information handling system of Claim 11, wherein the
2 one or more first processors are further adapted to
3 determine for which one of the secondary processors the
4 application's device-oriented instructions are intended.

1 13. The information handling system of Claim 12, wherein the
2 one or more first processors are adapted to perform the
3 determining by using information from the configuration
4 file.

1 14. The information handling system of Claim 9, wherein the
2 one or more first processors are adapted to load the
3 device module to facilitate a communication between the
4 application and one or more of the secondary processors
5 by extending the operating system.

1 15. The information handling system of Claim 9, wherein the
2 one or more first processors are adapted to facilitate a
3 communication between the application and one or more of
4 the secondary processors device-oriented instructions by
5 translating the application's instructions to secondary
6 processor's instructions.

1 16. The information handling system of Claim 9, wherein the
2 one or more secondary processors are adapted to perform
3 the instructions by the one or more secondary processors
4 processing application-provided data according to the
5 application's device-oriented instructions.

1 17. A computer program product on computer operable media,
2 the computer program product comprising:

3 means for executing an operating system by one or more
4 first processors included in a group of heterogeneous
5 processors;

6 means for loading a device module corresponding to one
7 or more secondary processors into the operating
8 system, wherein the secondary processors are included
9 in the group of heterogeneous processors;

10 means for executing an application, the application
11 including device-oriented instructions adapted to
12 control the one or more of the secondary processors;
13 and
14 means for performing the device-oriented instructions
15 at the one or more of the secondary processors.

1 18. The computer program product of Claim 17, further
2 comprising means for setting up a device-like access for
3 one or more of the secondary processors, the device-like
4 access being used by the application to access one or
5 more of the secondary processors.

1 19. The computer program product of Claim 18, further
2 comprising means for creating a configuration file, the
3 configuration file containing a list of one or more of
4 the secondary processors and the corresponding device-
5 like access determined for the one or more secondary
6 processors.

1 20. The computer program product of Claim 19, further
2 comprising means for determining for which of the one or
3 more of the secondary processor the application's device-
4 oriented instructions are intended.

1 21. The computer program product of Claim 20, wherein the
2 means for determining uses information from the
3 configuration file.

1 22. The computer program product of Claim 17, wherein the
2 means for loading the device module facilitates a
3 communication between the application and one or more of
4 the secondary processors.

1 23. The computer program product of Claim 17, further
2 comprising means for translating the application's
3 instructions to secondary processor instructions.

1 24. The computer program product of Claim 17, wherein the
2 means for performing the instructions comprises means for
3 processing application-provided data according to the
4 application's device-oriented instructions.